

pH1N1: Lessons learned

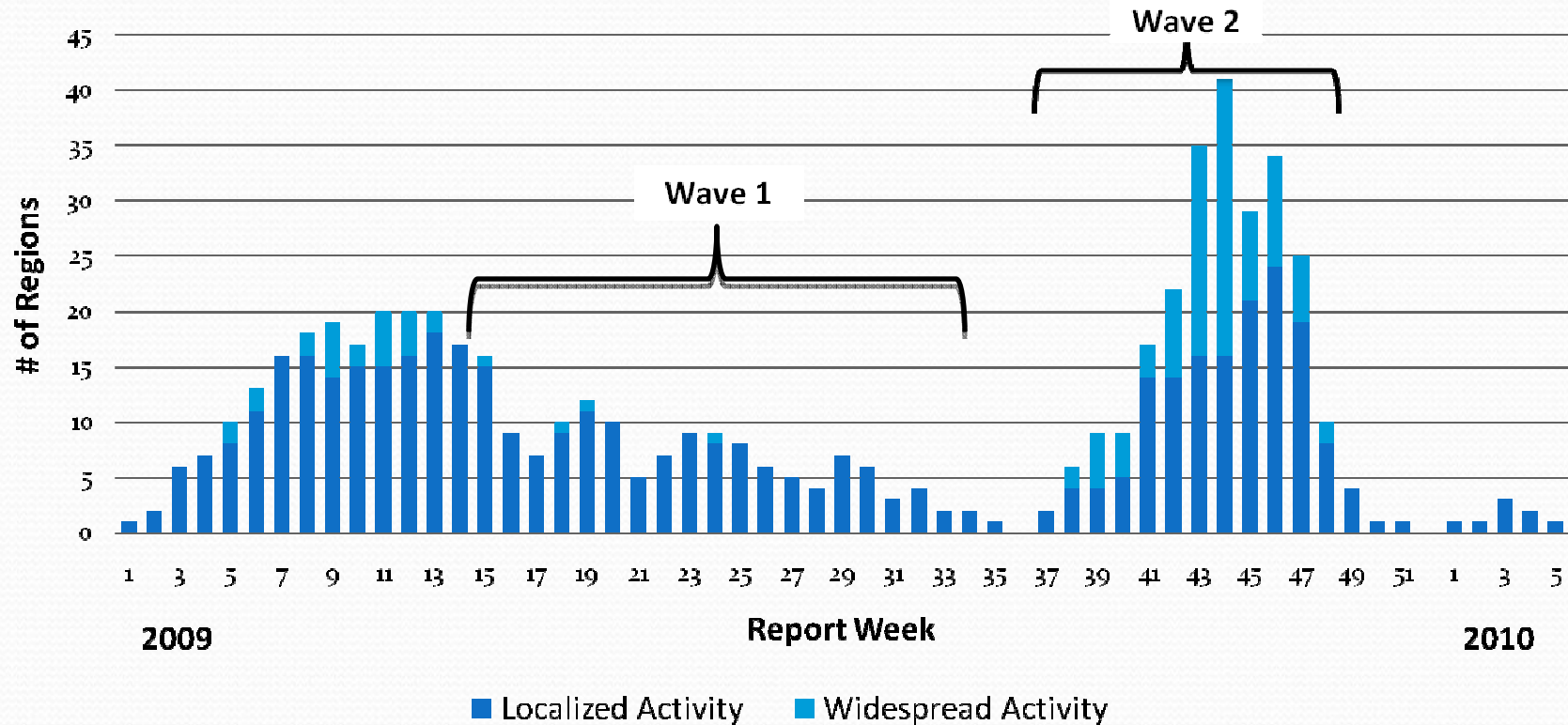
CAPHC Patient Safety Collaborative Teleconference

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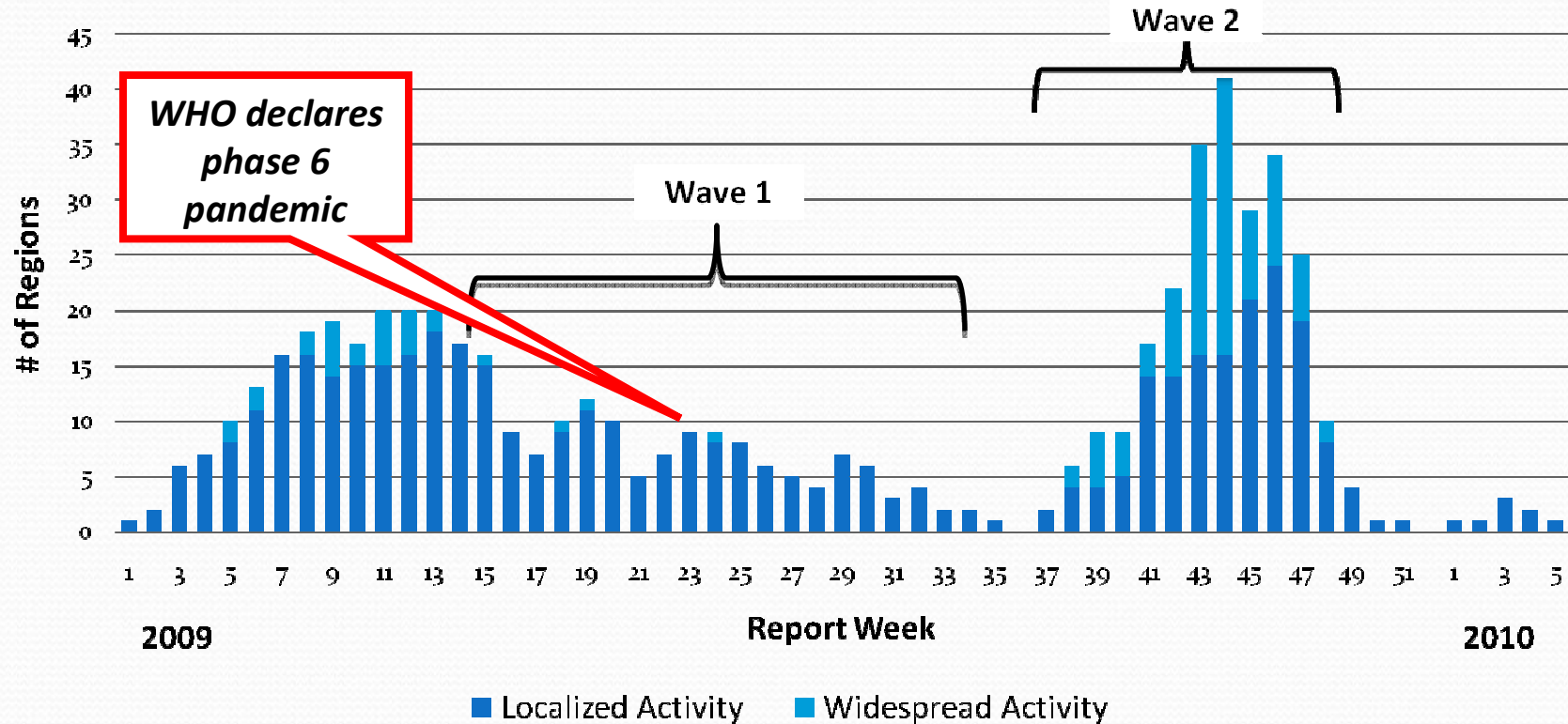
Influenza Activity

Number of influenza surveillance regions reporting widespread or localized influenza activity, Canada, by report week



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Facts & Figures

- **8,669 hospitalized cases** (Apr 12-Feb 27/10)
 - 17.0% cases admitted to ICU
 - 4.9% deaths
- **National hospitalization rate**
 - 25.7 per 100,000 population (*children < 5 years of age at 100.4 per 100,000*)
- **National mortality rate**
 - 1.3 per 100,000 population (*adults > 45 years of age at 2.1 per 100,000*)
- **National ICU admission rate**
 - 4.4 per 100,000 population
 - Adults 45 to 64 years (*6.4 per 100,000*)
 - Children < 5 years of age (*6.2 per 100,000*)



Underlying Medical Conditions

- **Hospitalization & mortality rates**
 - 5.8 times higher hospitalization rate
 - 25.5 times higher ICU admission rate
 - 10.9 times higher mortality rate
- **Most common conditions**
 - Chronic pulmonary disease (including asthma)
 - Diabetes & immunosuppression (including cancer)
 - Chronic heart disease
 - Neurological/neurocognitive disorder in children



National Experiences

- **Patient Activity**

- All centres saw a surge Emergency Rooms during H1N1
- Increases in inpatient varied across the country
- Post H1N1 complications are significant & still being seen in some centres
- Most common secondary complication is necrotizing pneumonia/empyema

- **Planning**

- Plans felt reactive versus proactive for some centres
- Many will be revising current plans so they are more principle-based & simplified



National Experiences

- **Response**

- Use of IMS & an active command centre helped monitor, make timely decisions & deal with communications issues
- Visitor restrictions & cancellation of clinics & elective admissions in some centres
- Re-deployment of staff and physicians required in some centres
- Community assessment centres helped Emergency Departments cope with increased numbers
- Ensuring staff did not burn out needed to be considered earlier
- Effective local and regional communication networks were extremely helpful where used



Consistent Themes

- **Issues**

- Timely lab results
- Facilities & human resources
- Clear & consistent communication
- Transitioning from “plan” to “operations”
- Sporadic & confusing release of vaccine
- Anti-virals & community flu assessment clinics
- Personal protective equipment (the need to use N95 masks)
- Networks doing parallel activities & communication
- Need for greater collaboration & information sharing (local, provincial, national)



Patient Safety Implications

- **Emergency response**
 - Were the right people involved
 - Were plans based on principles or “prescriptions”?
 - Does patient safety take a “backseat” in an emergency?
- **Staffing & redeployment**
 - How was staff anxiety & burn-out dealt with?
 - How was resource capacity & skill mix managed?
 - Do quality initiatives get put on hold during a surge?
- **Infection prevention & control**
 - What is the impact of supply & equipment shortages?
 - Was all the PPE, cohorting and IP practices really necessary ?



Balancing Act

Patient Safety

Resources



Emergency Planning



Key Lessons

1. Planning
2. Structure
3. Principles



Planning

What we expected...



Planning

...and what we
got

Bearman Cartoons

Porky The Swine



© 4/28/09 bearmancartoons.wordpress.com
Idea from George Ford (www.addanaccity.com/)

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Planning

- “Plans are useless, but planning is indispensable” (Eisenhower)
- Be flexible & prepare to adapt yourself and your response
- Continuous communication & relationship building should start in early planning phases & continue throughout the response



Structure

- Incident Management System
 - Effective control, direction & command of response
 - Centralized communication & information gathering
 - Provides venue to ensure patient care & safety remains focus
 - Need to build in sustainability for long term incidents such as pandemic





Incident Management System

Board

Incident Manager
CHS Director On-Call
Or CHS Administrator

 In the EM Command Centre

Executive Officer
(Members of the Executive)

Security Officer
(Protection Services)

Public Information Officer
(Public Affairs)

Recorder(s) / Aide(s) to the EMCC

Liaison Officer
(Emergency Measures, Risk Management)

Health & Safety Officer
(OH&S, Infection Prevention & Control)

Medical Care Director
(Senior Physician)

Operations Chief
(Patient Care)

Planning Chief
(Human Resources/Tracking)

Logistics Chief
(Facilities/Supplies)

Clinical Support Director

Emergency Treatment Areas Supervisor

Decontamination Unit Supervisor

Patient Care Liaison

Clinical Lab Unit Leader

Patient Tracking Leader

Security Leader

Triage Unit Leader

CBRN Set Up Leader

Unit Leader CCU

Diagnostic Imaging Unit Leader

Family Information Centre Leader

Facility Operations Leader

Immediate Care Treatment Unit Leader (RED)

Dirty Triage Leader

Unit Leader NICU

Pharmacy Unit Leader

Research/Scientific Expertise Leader

Nutrition Leader

Delayed Treatment Unit Leader (YELLOW)

Clean Triage Leader

Unit Leader etc.

Respiratory Therapy Unit Leader

Demobilization/Recovery Leader

Transportation

Minor Treatment Unit Leader (GREEN)

Unit Leader Ambulatory Area

Infection Prevention & Control Unit Leader

Redeployment Centre Leader

Finance Leader (Cost & Compensation)

Morgue Unit Leader (BLACK)

Unit Leader Ambulatory Area

Human Resources Leader

Material Management Leader

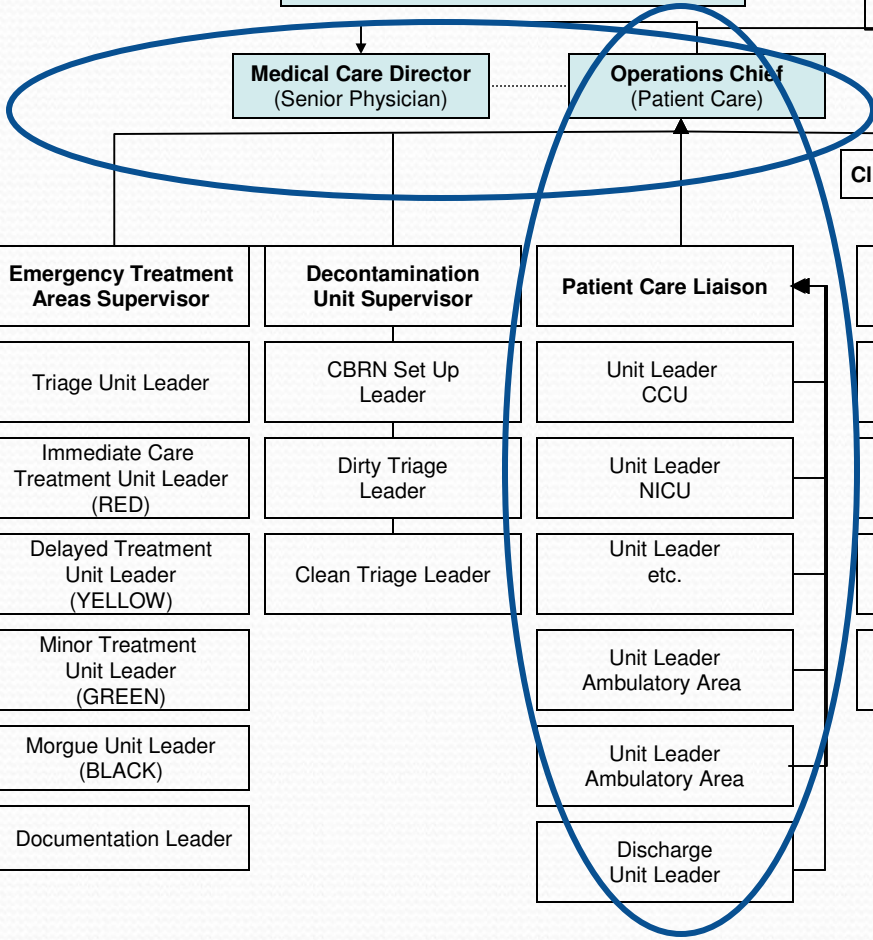
Documentation Leader

Discharge Unit Leader

- Psych Support Unit Leader
- Staff Support Unit Officer
- OH&S Unit Officer

Information Technology Leader

Biomedical Devices Leader



Principles

- Stay focused on key goals of the response
 - Minimize serious illness & overall deaths
 - Minimize societal disruption
 - Maintain system continuity
- Avoid getting caught “in the moment” or “mired in minutia”
- Use planning to develop a framework for the response & then maintain flexibility throughout



Questions & Discussion

